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A new species of the genus *Bradycassis* SPAETH, 1952 (Coleoptera: Chrysomelidae: Cassidinae)

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ABSTRACT: *Bradycassis agroiconotoides*, new to science, is described from N Argentina, Bolivia, S Brazil, and Paraguay.

Key words: entomology, taxonomy, new species, Coleoptera, Chrysomelidae, Cassidinae, Cassidini, *Bradycassis*, Neotropical Region.

The genus *Bradycassis* SPAETH, 1952 comprises 11 species distributed mostly in southern and central part of Brazil and adjacent regions (N Argentina, Paraguay, Uruguay), one species was described from French Guyana (BOROWIEC 1999, BOROWIEC & ŚWIĘTOJAŃSKA 2005).

The genus *Bradycassids* SPAETH, 1952 is a member of the tribe Cassidini. It is well distinguished from other genera of the tribe by the following combination of characters: venter of pronotum without antennal grooves, antennal segment 3 not or only slightly longer than segment 2, distal segments short, not longer than wide, five basal segments smooth and shiny, sixth segment intermediate, and five distal segments pubescent and dull, clypeus flat or slightly elevated, usually with central pit or impression, clypeal grooves distinct, frontoclypeal grooves absent because antennal cavities adjoined to anterior margin of clypeal plate, all claws with large basal tooth, pronotum elliptical with rounded sides, elytral disc regularly convex to slightly gibbous, elytral puncturation regular, explanate margin of elytra steeply declivous, impunctate or with irregular punctures, marginal row distinct, explanate margin of both pronotum and elytra transparent, with distinct honeycomb structure, elytral surface usually opaque, rarely shiny. The structure of clypeus in the

genus is unique, only *Agroiconota* SPAETH, 1913 has similar set of clypeal characters but differs in the presence of deep frontoclypeal grooves and clypeal plate strongly convex, forming a triangular or trapezoidal elevation.

Below, I describe a new species of *Bradycassis* from Argentina, Bolivia, S Brazil, and Paraguay. for several years I identified it as *Agroiconota parellina* SPAETH, 1937, a species described from the same region. Both taxa are extremely similar dorsally but examination of type specimen of *A. parellina* Sp. revealed me that under similar habitus exist two different species of two genera.

***Bradycassis agroiconotoides* n. sp.**

Agroiconota parellina: BOROWIEC 1996: 124, 2002: 48 (misidentifications).

ETYMOLOGY

Named after its external similarity to some members of the genus *Agroiconota* SPAETH, especially *A. parellina* SPAETH.

DIAGNOSIS

Small size, with length below 4.7 mm, impunctate explanate margin of elytra, and elytral disc at least on top with more or less distinct brown spot places it close only to *Bradycassis sordescens* (SPAETH, 1926). It differs in distinctly coarser



1-3. *Bradycassis agroiconotoides* n. sp.: 1 – male dorsal, 2 – female dorsal, 3 – female lateral

elytral puncturation, with punctures distinctly impressed, tending to form impressed rows on slope; yellow interspaces on sides of disc form more or less convex folds thus surface appears slightly irregular (in *B. agroiconotoides* punctures are not impressed, never form impressed rows, interspaces on sides of disc are not or indistinctly convex thus surface of disc appears regular). In *B. sordescens* brown areolae around punctures are broader than in *B. agroiconotoides*, tend to form more or less distinct brown spots, sometimes coalescent in brown bands, while in *B. agroiconotoides* in most specimens punctures have no dark areola, or areolae are narrow, separate and elytra do not appear maculate, or spots are very small and never coalescent. Brown spot on top of disc in *B. sordescens* is usually more evident than in *B. agroiconotoides*. At first glance the most similar species is *Agroiconota parellina* Sp. but it differs in the structure of clypeus, typical for the genus *Agroiconota*, with elevated triangular clypeal plate and presence of deep frontoclypeal grooves.

DESCRIPTION

Length: male 3.90-4.10 mm, female 4.50-4.75 mm; width: male 2.95-3.30 mm, female 3.30-3.50 mm; length of pronotum: male 1.45-1.50 mm, female 1.55-1.70 mm; width of pronotum: male 2.35-2.50 mm, female 2.60-2.70 mm; length/width ratio: male 1.24-1.32, female 1.31-1.36; width/length of pronotum ratio: male 1.60-1.67, female 1.59-1.68. Body stout, short oval, male smaller and stouter than female (figs 1, 2).

Pronotum yellow, unicolours or in front of scutellum with very narrow black stripe. Elytra yellow, in the palest specimens unicolours, but usually punctures with transparent areola and suture narrowly brown. In intermediate specimens some punctures with brown centre and narrow, brown areola, especially punctures of first row at top of disc and punctures in rows 3 and 4 tend to form brown areolae. In the darkest specimens top of disc with brown spot and areolae of punctures in rows 3 and 4 broad, almost touching each other but never coalescent and never form irregular spots. Head yellow except brown to black labrum. Thorax black, but prosternal process often brown, or yellowish-brown, prosternal alae with yellow spot. Abdomen black, narrowly surrounded by yellow. Legs yellow, except black coxae and trochanters. Antennal segments 1-7 yellow, segments 8-11 brown to black, segment 7 sometimes infuscate.

Pronotum elliptical, wider in mid length, sides rounded. Pronotal disc moderately convex, on each side with small impression. Surface of disc impunctate, slightly opaque. Explanate margin mostly smooth, only in basal part with fine pricks.

Scutellum impunctate. Base of elytra distinctly wider than base of pronotum, humeri rounded. Disc evenly convex, with top of convexity in postscutellar area (fig. 3). Puncturation regular, fine, on sides of disc only slightly coarser than in sutural rows, on slope punctures as coarse as or slightly coarser than on top of disc. On sides of disc and in slope punctures slightly impressed with spaces

between punctures partly slightly elevated but surface of disc appears regular. Punctures in rows sparse, distance between punctures two to four times wider than puncture diameter. Intervals in sutural part of disc broad, four to six times wider than rows, on sides twice to thrice wider than rows. Surface of intervals smooth, slightly opaque. Marginal row distinct, its punctures coarse, distinctly coarser than on sides of disc. Lateral margins of punctures in central part of marginal row with distinct tooth. Explanate margin moderately broad, approximately five times narrower than disc, steeply declivous, impunctate and slightly opaque. In apical part explanate margin narrow, approximately as wide as marginal row. Apex of elytral epipleura bare.

Clypeus broad, almost twice as wide as long, clypeal plate slightly elevated, trapezoidal, with deep median pit and narrow furrow running from the pit to anterior margin of clypeal plate. Clypeal grooves deep but short, extending from base to half length of clypeal plate. Labrum shallowly emarginate. Prosternal collar moderately broad, on sides without impressions. Prosternal process broad, only slightly expanded apically, central part shallowly impressed, apex with coarse punctures. Antennae stout, length ratio of antennal segments: 100:46:42:50:50:50:54:46:46:50:100, segment 3 slightly shorter than segment 2. Claws with large and sharp basal tooth.

DISTRIBUTION

Except type specimens listed below and collected in ARGENTINA: Misiones: Eldorado, Puerto Iguazu, and San Ignacio, BRAZIL: Foz de Iguáçu, and PARAGUAY: Puerto P. Stroessner, I recorded this species under the name *Agroiconota parellina* from the following localities: ARGENTINA: Delicia, Wanda; BOLIVIA: Guayaramerin; PARAGUAY: Alto Parana Centre forest, Asuncion (BOROWIEC 1996, 2002).

MATERIAL EXAMINED

Holotype: "Hungarian-Soil-Zool. Exp., PARAGUAY: Puerto P. Stroessner, 26-28.XII.1965" "Nr. P. 9, leg. Mahunka"; 5 paratypes: the same data; one paratype: the same data but "Nr. P. 10, leg. Balogh"; 10 paratypes: "Brazil, Parana, Foz de Iguázu, VIII-26, 28'54, on vegetation, coll. D.H. Dieke" "G.H. Dieke Coll'n. 1965"; 5 paratypes: "Hungarian-Soil-Zool. Exp., BRAZIL: Paraná, Foz de Iguazu, Iguazu Waterfalls, 29.XII. 1965" "Nr. P-B. 345, leg. Loksa et Mahunka"; 6 paratypes: the same data but "Nr. P-B. 347, leg. Balogh"; one paratype: "BRASIL, Iguacu Waterfalls, 15.-17.8.2000, Lgt. P. Kindlmann"; one paratype: "Argentina, Eldorado, Misiones, 14.9.1972, leg. A. Kovacs"; 6 paratypes: "ARG. Bordon leg., 25 XI-8 XII 1983" "Puerto Iguazu, 100 m, MISIONES"; one paratype: "ARG. Bordon leg., 11 XII 1983" "San Ignacio, 100 m. MISIONES"; one paratype: "ARGENTINA: Mis. 4 km NE Sanignado, I.22.1989, CW & LB O'Brien & G. Wibmer"; 15 paratypes: "Iguazu, Argentina, R. Foerster, 1981, Provinz Misiones" (holotype preserved at the Hungarian Natural History Mu-

seum, Budapest, Hungary, paratypes at the Agriculture Canada, ECORC, Ottawa, Ontario, Canada, at the Department of Biodiversity and Evolutionary Taxonomy, Wrocław University, Wrocław, Poland, at the Hungarian Natural History Museum, Budapest, Hungary, at the Museo Regionale di Storia Naturale, Torino, Italy, at the Staatliches Museum für Naturkunde, Stuttgart, Germany, and at the United States National Museum, Washington, USA).

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